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MAY 18 1970

CURRENT SERIAL RECORDS

WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

UNITED STATES DEPARTMENT of AGRICULTURE--SOIL CONSERVATION SERVICE
and

COLORADO AGRICULTURAL EXPERIMENT STATION
STATE ENGINEER of COLORADO
and STATE ENGINEER of NEW MEXICO

Data included in this report were obtained by the agencies named above in cooperation with the Bureau of Reclamation, U.S. Forest Service, National Park Service, Corps of Engineers and other Federal, State, and private organizations.

AS OF
MAY 1, 1970

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	12417 Federal Building, Denver, Colorado 80202
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 98, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Building, Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 340, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES.

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



WATER SUPPLY OUTLOOK FOR COLORADO AND NEW MEXICO

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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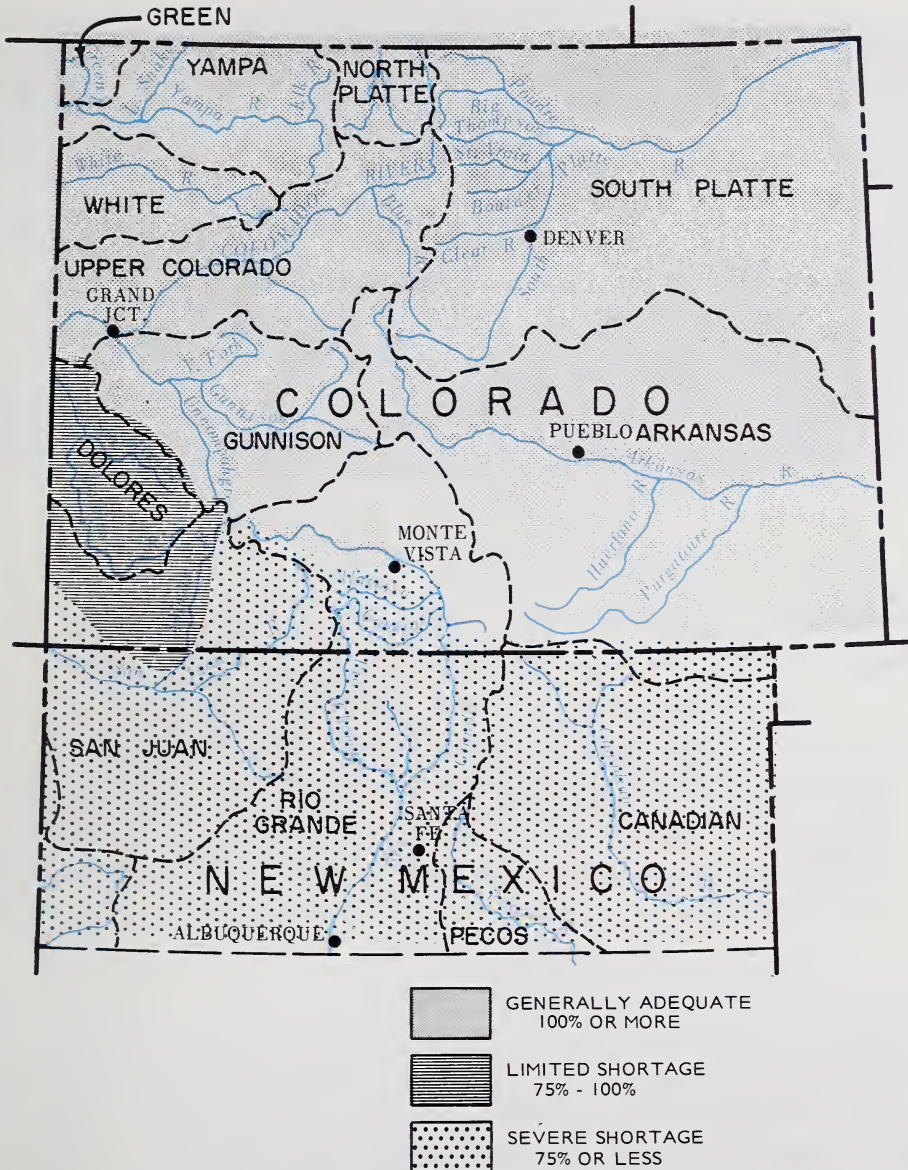
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WATERSHED II	<p>- ARKANSAS RIVER WATERSHED</p> <p>Describes water supply conditions in Lake County, Upper Arkansas, Fremont, Custer County Divide, Fountain Valley, Black Squirrel, Horse-Rush Creek, Central Colorado, Turkey Creek, Pueblo, Bessemer, Olney Boone, Cheyenne, Upper Huerfano, Stonewall, Spanish Peaks, Purgatoire, Branson Trinchera, Western Baca County, Southeastern Baca County, Two Buttes, Bent, Timpas, Northeast Prowers, Prowers, West Otero, East Otero, and Big Sandy Soil Conservation Districts.</p>
WATERSHED III	<p>- RIO GRANDE WATERSHED (COLORADO)</p> <p>Describes water supply conditions in Rio Grande, Center, Mosca Hooper, Mt. Blanca, Sanches, and Culebra Soil Conservation Districts.</p>
WATERSHED IV	<p>- RIO GRANDE WATERSHED (NEW MEXICO)</p> <p>Describes water supply conditions in Lower Cebolla, Abiquiu-Vallecitos, Eastern Taos, Lindrith, Coyote-Canones, Espanola Valley, Pojoaque, Jemez, Santa Fe-Sandoval, Tijeras, Cuba, and Edgewood Soil Conservation Districts.</p>
WATERSHED V	<p>- DOLORES, SAN JUAN, AND ANIMAS RIVERS WATERSHED</p> <p>Describes water supply conditions in San Miguel Basin. Dove Creek, Dolores, Mancos, LaPlata, Pine River, San Juan, and Glade Park Soil Conservation Districts.</p>
WATERSHED VI	<p>- GUNNISON RIVER WATERSHED</p> <p>Describes water supply conditions in Delta, Gunnison, Cimarron, Shavano, and Uncompahgre Soil Conservation Districts.</p>
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WATER SUPPLY OUTLOOK

as of
May 1, 1970



The map on this page indicates the most probable water supply as of the date of this report. Estimates assume average conditions of snow fall, precipitation and other factors from this date to the end of the forecast period. As the season progresses accuracy of estimates improve. In addition to expected streamflow, reservoir storage, soil moisture in irrigated areas, and other factors are considered in estimating water supply. Estimates apply to irrigated areas along the main streams and may not indicate conditions on small tributaries.

WATER SUPPLY CONDITIONS

as of
May 1, 1970

APRIL SNOWS FOLLOWED THE SAME PATTERN AS PREVIOUS MONTHS. THE NORTHERN HALF OF COLORADO HAD ABOVE NORMAL SNOW WHILE THE SOUTHERN HALF AND NEW MEXICO HAD NORMAL TO BELOW SNOWFALL.

FORECASTS WERE RAISED 10% TO 20% IN THE NORTH AND REMAINED ABOUT THE SAME AS FORECAST APRIL 1st IN THE SOUTH.

SOME HIGH WATER CAN BE EXPECTED IN THE SOUTH PLATTE DRAINAGE. ALL THE RESERVOIRS ARE NEARLY FULL AND RIVER FLOW FORECASTS RANGE ABOVE 140%.

IF TEMPERATURES REMAIN LOW AND THERE IS NO EXCESSIVE RAINFALL, NO MAJOR DAMAGE IS EXPECTED.

SOIL MOISTURE THROUGHOUT COLORADO IS EXCELLENT. NEW MEXICO REPORTS FAIR TO POOR SOIL MOISTURE CONDITIONS.



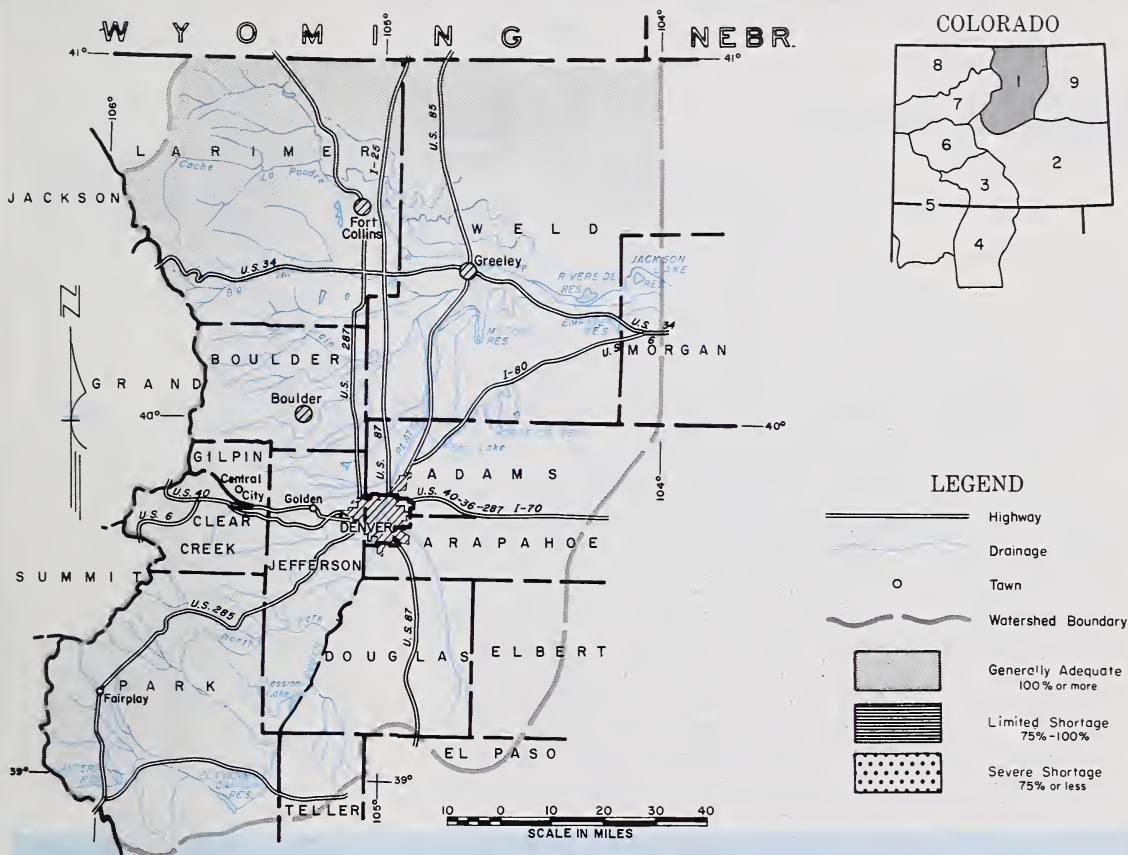
COLORADO -- COLORADO SHOULD HAVE AN EXCELLENT WATER SUPPLY THIS SUMMER. THE ONLY TWO AREAS THAT WILL HAVE SOME SHORTAGE ARE THE RIO GRANDE AND SAN JUAN DRAINAGES. SHORTAGE HERE SHOULD NOT BE SEVERE. THE REST OF THE STATE'S STREAMS SHOULD FLOW CONSIDERABLY ABOVE NORMAL. THE SOUTH PLATTE AND ITS NORTHERN TRIBUTARIES MAY HAVE MORE WATER THAN THEY CAN HANDLE. SOME HIGH WATER IS EXPECTED IN THIS AREA. OTHER MAJOR STREAMS ARE EXPECTED TO FLOW ABOVE NORMAL, BUT NO HIGH FLOW PROBLEMS ARE EXPECTED. RESERVOIR STORAGE IS GOOD. SOIL MOISTURE CONDITIONS ARE REPORTED AS EXCELLENT.



NEW MEXICO -- SOME WATER SHORTAGE IS EXPECTED IN NEW MEXICO THIS SUMMER. THE RIO GRANDE SHOULD FLOW ABOUT 70% OF NORMAL. THE SAN JUAN SHOULD ALSO HAVE SUMMER FLOWS WELL BELOW NORMAL. THE SNOW PACK DID NOT IMPROVE DURING APRIL. ALL BUT THE VERY HIGH ELEVATION SNOW HAS ALREADY DISAPPEARED. SOIL MOISTURE CONDITIONS ARE ONLY FAIR. SOME WATER MAY BE NEEDED TO IRRIGATE UP CROPS. CARRY-OVER STORAGE IS BETTER THAN NORMAL AND WILL BE AN EXCELLENT SUPPLEMENT. UNLESS SUMMER RAINFALL IS ABOVE NORMAL LATE SEASON FLOWS WILL BE VERY LOW.

as of
May 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOW PACK ON THE SOUTH PLATTE AND ITS TRIBUTARIES IS NEAR THE MAXIMUM OF RECORD. SOME SNOW COURSES HAVE ABOVE MAXIMUM SNOW AS OF MAY 1st.

WATER SUPPLIES SHOULD BE EXCELLENT. THERE IS A GOOD CHANCE FOR HIGH WATER OVER THE ENTIRE BASIN. MUCH WILL DEPEND UPON SPRING TEMPERATURES AND RAINFALL.

LOW AREAS ALONG RIVER CHANNELS CAN EXPECT SOME HIGH WATER THROUGH JUNE AND INTO EARLY JULY.

This report prepared by

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT and Forecast Period	Forecast	Apr.-Sept. Average	
Big Thompson at Drake (1)	140	140	100
Boulder at Orodell	78	159	49
Cache La Poudre at Canon Mouth (2)	300	140	215
Cl. Cr. at Golden(3)	200	168	119
St. Vrain at Lyons(4)	115	164	70

(1) Observed flow minus trans-basin diversions plus municipal and irrigation diversions.
(2) Observed flow minus trans-basin diversions plus municipal and irrigation diversions.
(3) Observed flow minus diversion through August P. Gumlick Tunnel.
(4) Observed flow minus change in storage in Price Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average †
Big Thompson	5	221	156
Boulder	3	296	172
Cache La Poudre	8	205	165
Clear Creek	5	248	157
Saint Vrain	3	428	168
South Platte	3	305	202

RESERVOIR STORAGE (Thousand Ac. Ft.)

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average †
Antero	33.0	15.9	15.9	10.6
Barr Lake	32.2	28.0	27.8	23.0
Black Hollow	8.0	4.0	3.5	3.5
Boyd Lake	44.0	41.3	38.9	27.7
Cache La Poudre	9.5	8.9	8.5	8.0
Carter Lake	108.9	104.5	90.8	86.4
Chambers Lake	8.8	3.4	2.5	3.3
Cheesman	79.0	79.1	49.6	50.2
Cobb Lake	34.0	18.5	14.7	9.8
Eleven Mile	97.8	96.4	94.6	72.9
Fossil Creek	11.6	10.3	8.4	7.0
Gross	43.1	36.7	30.0	17.4

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OFFICIAL BUSINESS

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Bear Creek	Exc.	Exc.
Coal Creek	Exc.	Exc.
North Fork of South Platte	Exc.	Exc.
North Fork of Cache La Poudre	Exc.	Exc.
Ralston Creek	Exc.	Exc.
Rock Creek	Exc.	Exc.

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average †
Big Thompson	3	93	108
Boulder	1	121	93
Cache La Poudre	2	81	92
Clear Creek	1	118	130
Saint Vrain	2	97	103
South Platte	2	88	89

RESERVOIR STORAGE (Thousand Ac. Ft.)

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average †
Halligan	6.4	3.0	6.4	5.6
Horsetooth	143.5	123.6	116.8	116.9
Lake Loveland	14.3	10.4	5.8	9.0
Lone Tree	9.2	8.1	4.4	7.9
Mariano	5.4	5.1	5.6	2.0
Marshall	10.3	8.5	3.6	4.0
Marston	18.0	16.6	15.4	15.5
Milton	24.4	16.0	17.4	11.0
Standley	42.0	37.2	18.2	11.9
Terry Lake	8.2	6.1	4.5	5.3
Union	12.7	12.7	3.3	8.0
Windsor	18.6	14.9	11.5	14.7

*This year in percent of avg.



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WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE ARKANSAS RIVER WATERSHED IN COLORADO

as of
May 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



SNOW PACK DURING APRIL CONTINUED TO IMPROVE. THE PACK IS NOW 165% OF THE 1953-67 AVERAGE. AN EXCELLENT WATER YEAR IS IN PROSPECT. SOIL MOISTURE IS GOOD IN THE IRRIGATED AREAS AS WELL AS THE MOUNTAINS.

THE APRIL-SEPTEMBER FLOW SHOULD BE 130% OF NORMAL. RESERVOIR STORAGE IS ABOVE NORMAL. HIGH WATER MAY OCCUR IN SOME AREAS IF TEMPERATURES SHOULD REMAIN HIGH OR SPRING RAINS ARE ABOVE NORMAL.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr.-Sept.

FORECAST POINT and Forecast Period	Forecast	Average ⁺	

Arkansas nr Pueblo (1)	440	148	298
Ark. at Salida (1)	400	129	309
Cucharas nr LaVeta	14	117	12
Purgatoire at Trinidad	70	152	46

(1) Observed flow plus change in Clear Creek, Twin Lakes, and Turquoise Reservoirs minus diversions through Busk-Ivanhoe, Divide, Twin Lakes and Homestake Tunnels and Ewing, Front Pass, Wurtz and Colombine ditches.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁺

Arkansas	10	237	166
Cucharas and Purgatoire	3	---	321

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season

Apishapa	Exc.	Avg.
Fountain Creek	Exc.	Avg.
Grape	Exc.	Avg.
Hardscrable Creek	Exc.	Avg.
Huerfano	Exc.	Avg.
Monument Creek	Exc.	Avg.

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁺

Arkansas	3	92	73
Cucharas and Purgatoire	1	101	99

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁺

Adobe	61.6	17.3	0.0	10.6
Clear Creek	11.4	10.1	8.1	6.4
Cucharas	40.0	1.8	0.7	4.8
Great Plains	150.0	114.9	11.5	35.9
Horse Creek	26.9	19.7	0.0	4.7

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

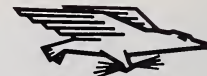
RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁺

John Martin	353.9	57.0	24.7	67.9
Meredith	41.9	24.8	0.0	9.3
Model	15.0	2.4	1.5	2.4
Turquoise	130.0	42.8	35.5	6.2
Twin Lakes	57.9	37.3	27.2	17.7

⁺ 1953-1967 period.

*This year in percent of avg.

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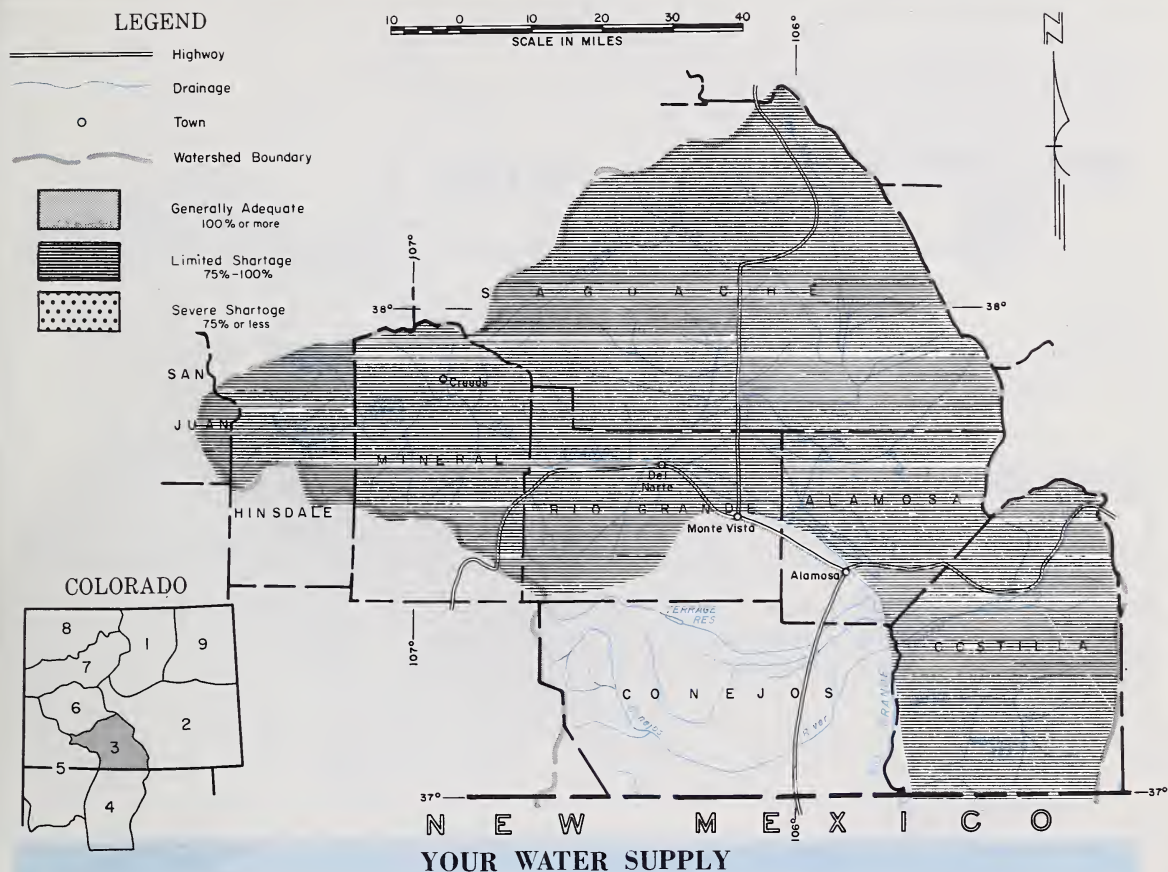
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WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE UPPER RIO GRANDE WATERSHED IN COLORADO as of

May 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



THE SNOW PACK IMPROVED ONLY SLIGHTLY DURING APRIL. THERE IS EXPECTED TO BE SOME WATER SHORTAGE THIS SUMMER. THE SNOW PACK ON THE RIO GRANDE IS JUST ABOUT NORMAL, HOWEVER, FORECASTS ARE FOR ABOUT 85% OF NORMAL RUNOFF. THE SANGRE DE CRISTO MOUNTAINS HAVE A SMALL AREA OF FAIRLY HEAVY SNOW ABOVE SAN LUIS. CULEBRA CREEK SHOULD FLOW ABOVE NORMAL. SOIL MOISTURE IS EXCELLENT AND SHOULD REDUCE WATER DEMANDS.

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DENVER, COLORADO DURANGO, COLORADO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT and Forecast Period	Forecast	Apr.	Sept.
		Average	+
		*	
Alamosa abv Terrace	43	69	62
Conejos nr Mogote(1)	125	69	182
Culebra at San Luis (2)	25	131	19
Rio Gr. at 30 Mile Bridge (3)	100	85	117
Rio Gr. nr Del Norte (3)	370	85	438
So. Fk. at So. Fk.	85	77	110

- (1) Observed flow plus change in storage in Platoro Reservoir.
 (2) Observed flow plus change in storage in Sanchez Reservoir.
 (3) Observed flow plus change in storage in Santa Maria, Rio Grande and Continental Reservoirs.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average +
Alamosa	2	106	103
Conejos	3	76	117
Culebra	2	262	222
Rio Grande	10	103	101

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average +
Continental	26.7	6.9	7.2	5.8
Platoro	60.0	4.0	4.6	8.1
Rio Grande	45.8	29.4	23.3	15.0

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Saguache Creek	Avg.	Poor
Sangre de Cristo Cr.	Avg.	Poor
Trinchera	Avg.	Poor

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average +
Alamosa	2	92	92
Conejos	1	82	82
Culebra	1	101	99
Rio Grande	3	97	96

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average +
Sanchez	103.2	20.0	12.7	12.3
Santa Maria	45.0	6.9	4.7	6.9
Terrace	17.7	9.9	9.9	5.7

+ 1953-1967 period.

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*This year in percent of 1953-1967 average.



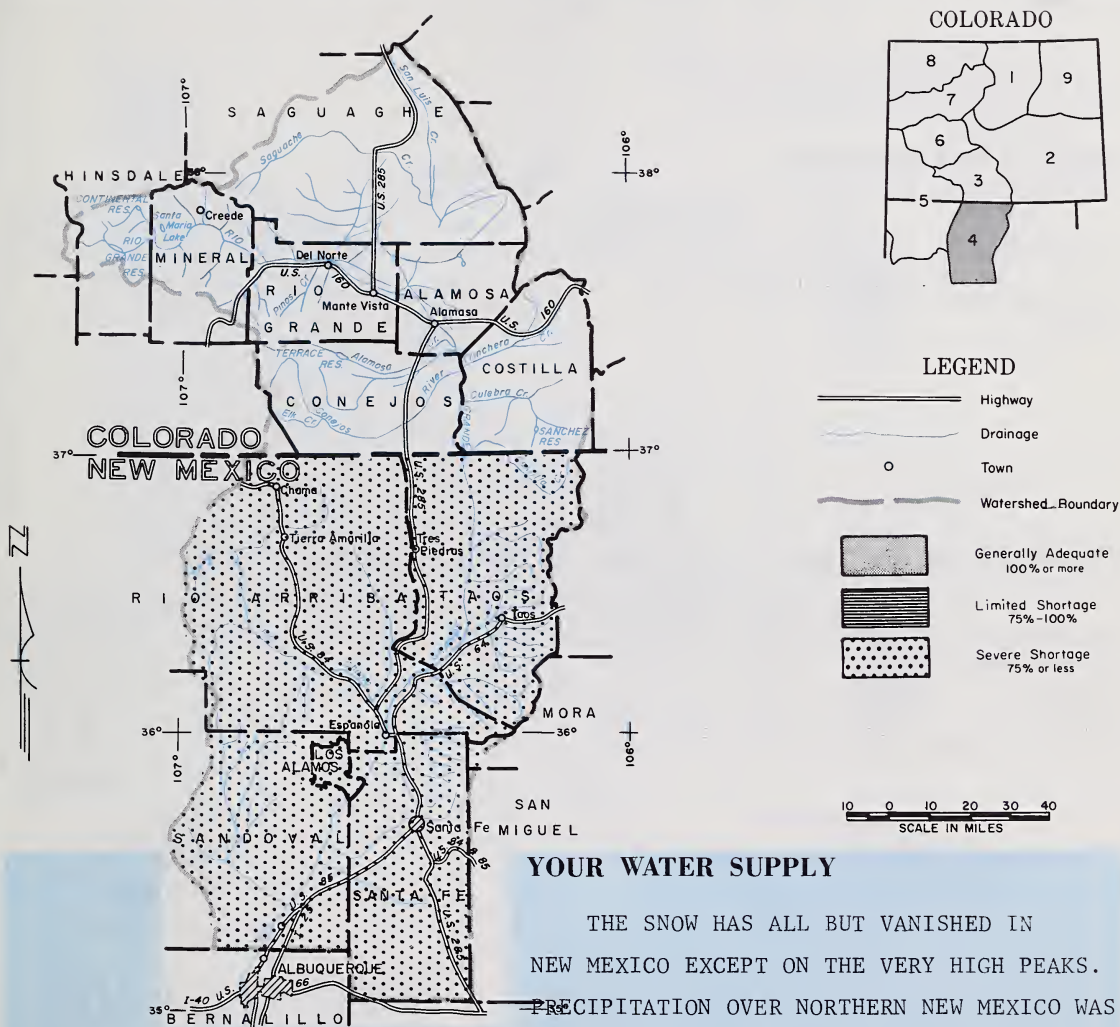
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WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE RIO GRANDE WATERSHED IN NEW MEXICO

as of
May 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr.-Sept.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

FORECAST POINT and Forecast Period	Forecast	Average	+
Costilla at Cost.(1)	15	83	18
Pecos at Pecos	25	61	41
Rio Chama to ElVado	135	72	188
Rio Gr. at Otowi(2)	370	72	513
Rio Gr. at San Mar(2)	200	60	334
Rio Hondo nr Valdez	12	80	15
Red R. at Mouth nr Questa	22	70	32

The forecast of the Rio Grande at San Marcial is 31% of the Average used by the Elephant Butte Irrigation District.
 (1) Observed flow plus change in Costilla Reservoir.
 (2) Observed flow plus change in storage in El Vado and Abiquiu Reservoir.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Embudo Creek	Avg.	Poor
Jemez River	Avg.	Poor
Mora River	Avg.	Poor
Nambe Creek	Avg.	Poor
Rio Ojo Caliente	Avg.	Poor
Rio Pueblo de Taos	Avg.	Poor
Santa Fe Creek	Avg.	Poor

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average
No snow measurements scheduled this month.			

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average
No soil moisture readings scheduled this month.			

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average
Alamogordo	111	85	32	64
Caballo	344	53	55	75
Conchas	273	233	111	150
Elephant Butte	2195	479	353	322

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average
ElVado	195	8	4	31
McMillen-Avalon	32	12	21	12

+ 1953-1967 period.

*This year in percent of avg.

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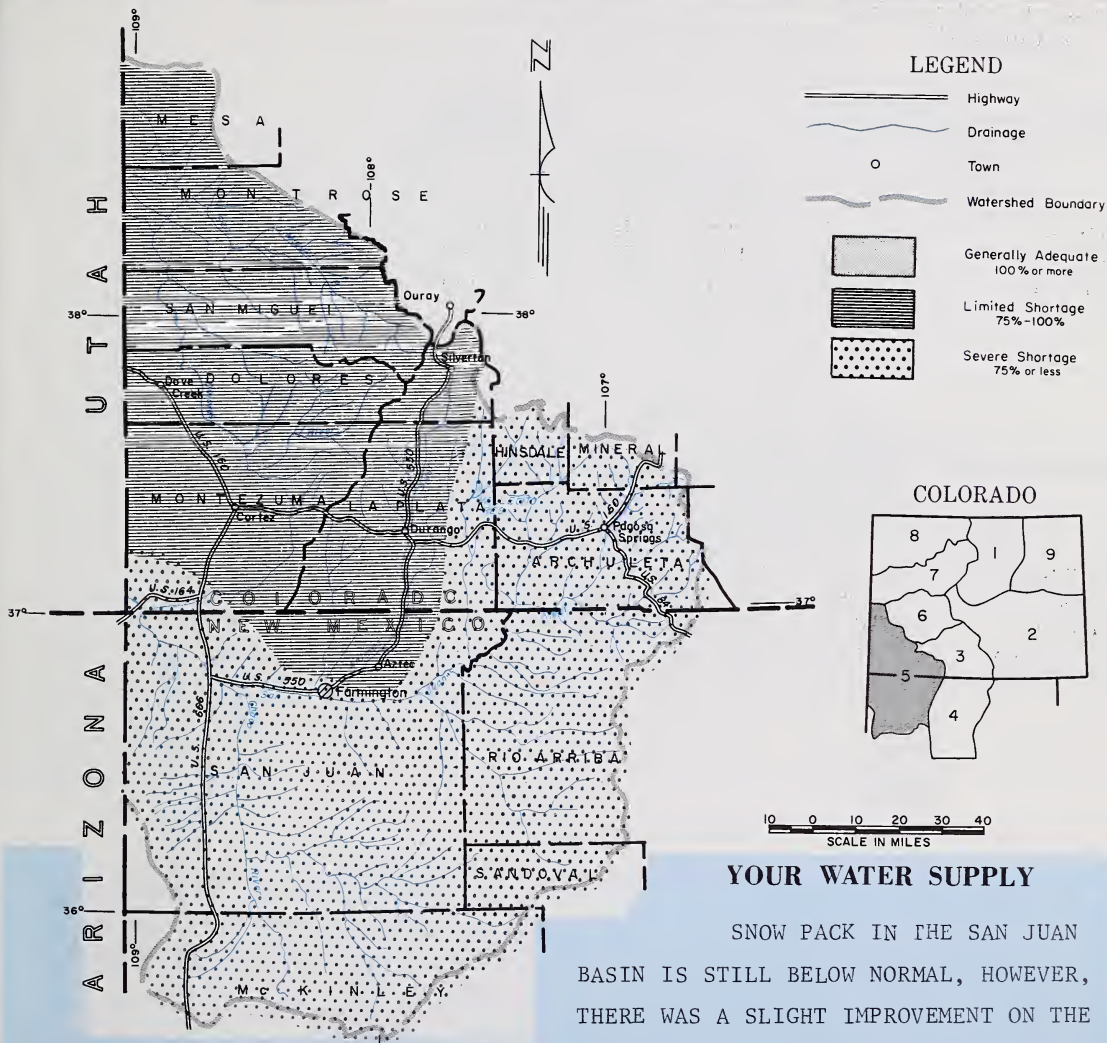
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WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE SAN MIGUEL, DOLORES, ANIMAS, SAN JUAN WATER SHEDS IN COLORADO AND NEW MEXICO

as of
May 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



SNOW PACK IN THE SAN JUAN BASIN IS STILL BELOW NORMAL, HOWEVER, THERE WAS A SLIGHT IMPROVEMENT ON THE DOLORES AND ANIMAS DRAINAGES. THESE TWO STREAMS SHOULD HAVE NEAR NORMAL FLOWS. THE REMAINDER OF THE STREAMS IN THE BASIN SHOULD FLOW ABOUT 70% OF THE 1953-67 AVERAGE.

SOIL MOISTURE IS GOOD AND RESERVOIR CARRY-OVER STORAGE IS ABOVE NORMAL.

This report prepared by

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SANTA FE, NEW MEXICO

The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr.-Sept.

FORECAST POINT and Forecast Period	Forecast	Average [†]	
		1957	1956
Animas at Durango	375	92	409
Dolores at Dolores	210	91	231
La Plata at Hesperus	17	71	24
Los Pinos at Bayfield (1)	140	72	194
Piedra Cr. at Piedra	118	72	163
San Juan at Carracas	265	70	379
Inflow to Navajo Res. (1) (Apr-Jul)	420	68	619

(1) Observed flow plus change in storage in Vallecito Reservoir.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average [†]
Animas	6	99	122
Dolores	4	127	175
San Juan	3	83	91

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average [†]
Groundhog	22	14	14	9
Lemon	40	32	19	19
Navajo	1036	876	895	326
Vallecito	126	83	95	59

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Florida	Exc.	Avg.
Mancos	Exc.	Avg.
San Miguel	Exc.	Avg.

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average [†]
Animas	3	90	70
Dolores	3	87	87
San Juan	2	81	71

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average [†]

*This year in percent of avg.

[†] 1953-1967 period.

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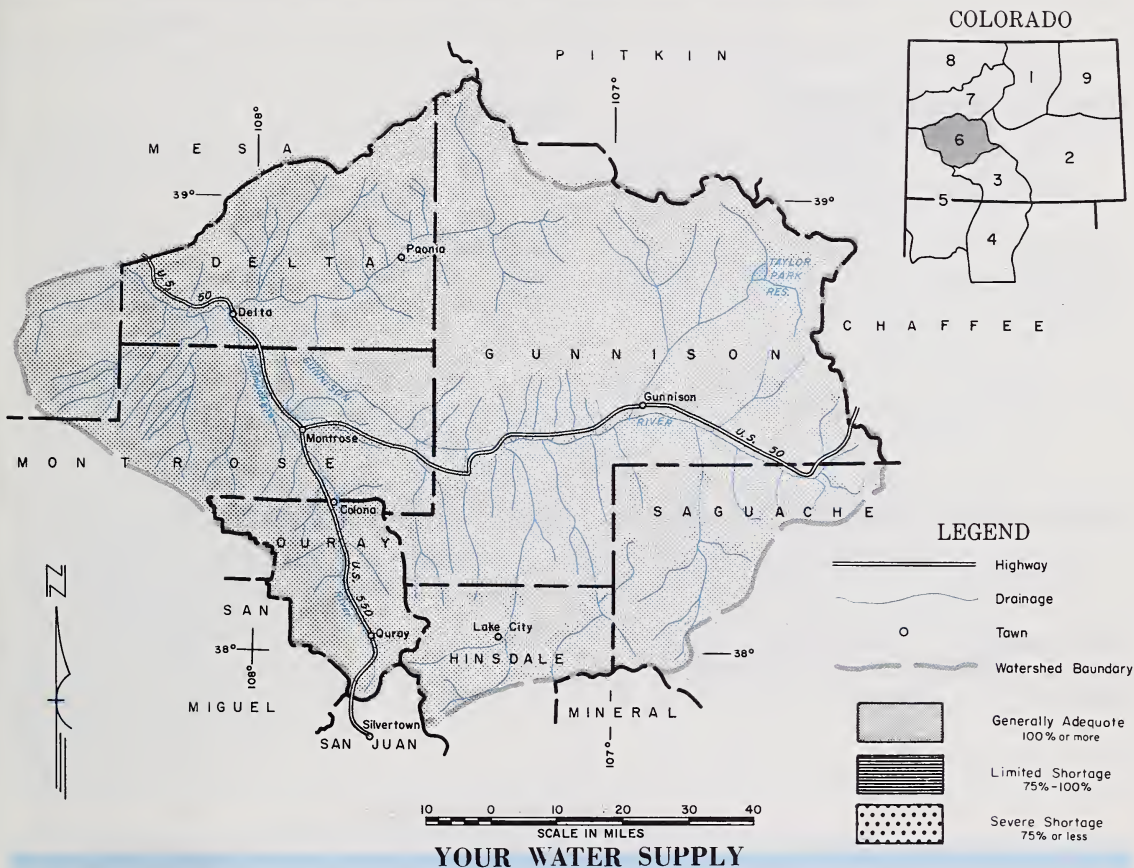
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WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE GUNNISON RIVER WATERSHED IN COLORADO

as of

May 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



STREAMFLOW FORECASTS WERE INCREASED THIS MONTH. THE GUNNISON RIVER WAS INCREASED CONSIDERABLY WHILE THE UNCOMPAHGRE AND SURFACE CREEK WERE RAISED SLIGHTLY. ADEQUATE WATER SUPPLIES SHOULD BE AVAILABLE THIS SUMMER. FORECASTS ARE BASED ON NORMAL PRECIPITATION FOR THE REMAINDER OF THE YEAR.

SOIL MOISTURE CONDITIONS ARE GOOD IN THE IRRIGATED AND MOUNTAIN SOILS. RESERVOIR STORAGE IS GOOD WITH 115% OF LAST YEAR'S STORAGE.

This report prepared by

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT and Forecast Period		Apr. - 1953 Years Flow	Sept. - 1953 Average
Gunnison nr Gr. Junction (1)	1675	147	1137
Surface Cr. nr Cedaridge	18	113	16
Uncompahgre at Colona	140	109	129

(1) Observed flow plus change in storage in Blue Mesa and Morrow Point Reservoirs.

SUMMARY of SNOW MEASUREMENTS (COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average +
Gunnison	12	150	142
Surface Creek	3	107	125
Uncompahgre	3	178	157

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average +
Blue Mesa	941	425	362	--
Morrow Point	121	117	109	--
Taylor	106	54	46	59

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
North Fork of Gunnison Taylor	Exc. Exc.	Exc. Exc.

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average +
Gunnison	1	100	100
Surface Creek	1	90	117
Uncompahgre	1	90	117

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average +

+ 1953-1967 period.

*This year in percent of avg.

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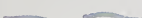



WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE COLORADO RIVER WATERSHED IN COLORADO

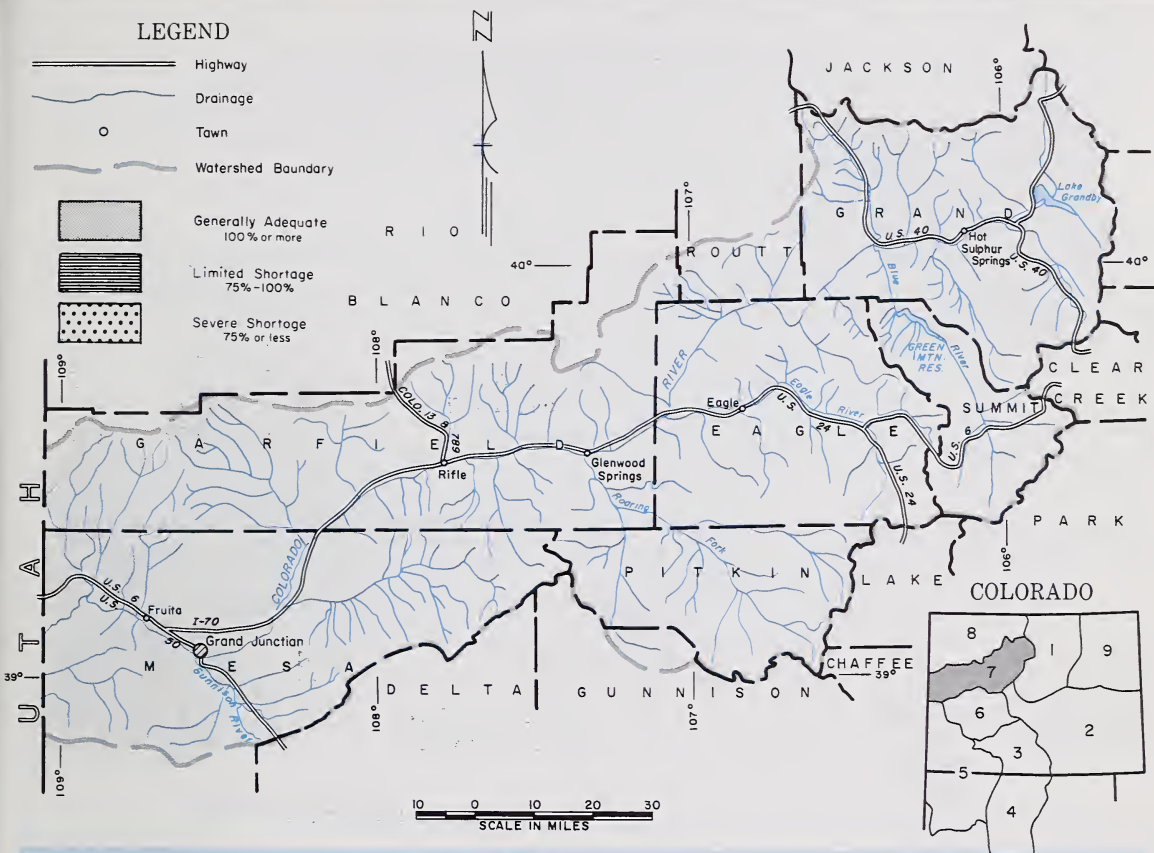
as of

May 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO

LEGEND

-  Highway
-  Drainage
-  Town
-  Watershed Boundary
-  Generally Adequate
100% or more
-  Limited Shortage
75%-100%
-  Severe Shortage
75% or less



YOUR WATER SUPPLY

SNOW PACK IS MUCH ABOVE AVERAGE BECAUSE OF ABOVE AVERAGE SNOWFALL AND BELOW AVERAGE TEMPERATURES. ALL STREAMFLOW FORECASTS HAVE BEEN INCREASED. MOST STREAMS ARE FORECAST AT ABOUT 140% OF AVERAGE WITH THE EXCEPTION OF WILLIAMS RIVER AND WILLOW CREEK WHICH ARE ABOUT 175%.

SOIL MOISTURE CONDITIONS ARE REPORTED AS GOOD IN THE IRRIGATED AREAS. MOUNTAIN SOIL MOISTURE IS ABOVE AVERAGE.

STREAMFLOW FORECASTS ARE BASED ON NORMAL PRECIPITATION FOR THE REMAINDER OF THE YEAR.

This report prepared by

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr.-Sept.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

FORECAST POINT and Forecast Period	Forecast	Average
Blue ab Gr. Mt. (1)	345	146
Colo. Rv inflow to Granby Res. (2)	300	137
Colo. Rv nr Dots. (3)	1950	142
Roar. Fk at Glspr. (4)	950	137
Wm. Fk nr Par. (5)	105	175
Will. Cr. inflow to Will. Cr. Res.	80	174
Colo. nr Cameo (6)	3200	144

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Brush	Exc.	Avg.
Eagle River	Exc.	Avg.
Gypsum Creek	Exc.	Avg.

(1) Observed flow plus diversions through Roberts Tunnel and change in storage in Dillon Reservoir.

(2) Observed flow corrected for change in storage in Lake Granby as furnished by U.S.B.R. and diversions by Adams Tunnel and Grand River Ditch.

(3) Observed flow plus the changes as indicated in (1), (2) and (5) plus Moffat Ditch and change in Homestake, Williams Fork, Green Mt. and Willow Creek Reservoirs.

(4) Observed flow plus diversions through Divide and Twin Lakes Tunnels plus change in storage in Ruedi Reservoir.

(5) Observed flow plus diversions through August P. Gumlick Tunnel.

(6) Observed flow plus the changes as indicated in (3) and (4).

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average
Blue River	8	238	165
Colorado	22	233	170
Plateau	3	103	119
Roaring Fork	7	206	158
Williams Fork	3	306	175
Willow	2	221	196

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average
Blue River	1	118	110
Colorado	5	97	103
Roaring Fork	1	125	107
Willow	1	129	127

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average
Dillon	254	239	228	223
Granby	466	226	142	205
Green Mountain	147	37	59	43
Homestake	43	14	7	--

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average
Ruedi	101	54	57	--
Vega	32	16	17	13
Williams Fork	97	39	30	34
Willow Creek	9	9	7	--

+ 1953-1967 period.

*This year in percent of avg.

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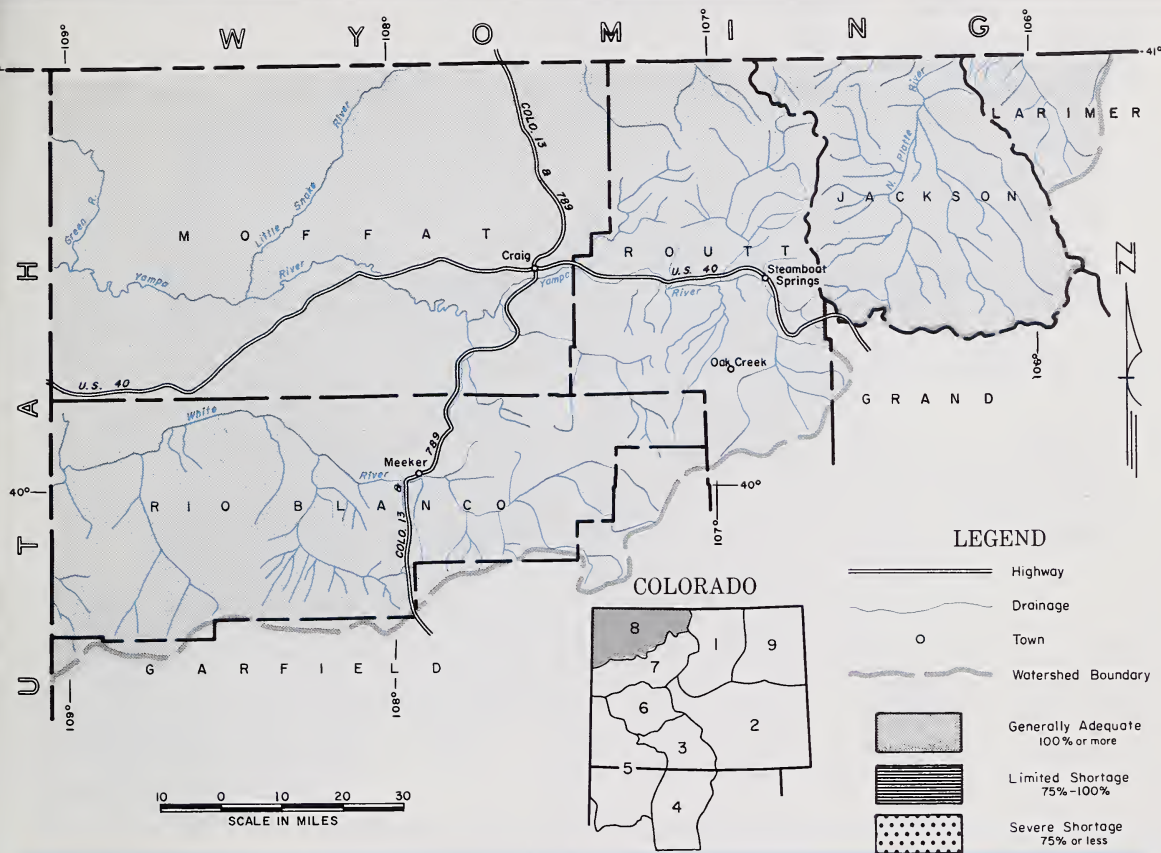
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WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE YAMPA, WHITE, AND NORTH PLATTE RIVER WATERSHEDS IN COLORADO

May 1, 1970

U. S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

WATER SUPPLIES WILL BE EXCELLENT THIS SUMMER. THE SNOW PACK IS APPROACHING THE MAXIMUM OF RECORD. THE DEEPEST SNOW EVER MEASURED BY THE SOIL CONSERVATION SERVICE OCCURRED NEAR STEAMBOAT SPRINGS ON BUFFALO PASS.

ALL STREAMS IN THIS BASIN ARE FORECASTED MUCH ABOVE NORMAL. VALLEY SOILS ARE IN EXCELLENT CONDITION AND MOUNTAIN SOILS CONTAIN MORE MOISTURE THAN NORMAL.

This report prepared by

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.) Apr.-Sept.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

FORECAST POINT and Forecast Period	Forecast	Average ⁺	
Elk at Clark	237	124	191
Laramie at Jelm	154	148	104
Little Snake at Lily	465	168	277
No. Platte at Northgate	370	164	225
White nr Meeker	380	130	293
Yampa nr Maybell	1200	141	853
Yampa at Steamboat Springs	370	142	260

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Canadian River	Exc.	Exc.
Hunt Creek	Exc.	Exc.
Illinois River	Exc.	Exc.
Michigan River	Exc.	Exc.
Oak Creek	Exc.	Exc.
Trout Creek	Exc.	Exc.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁺
Elk	3	201	180
Laramie	3	183	136
North Platte	5	165	157
White	2	239	166
Yampa	6	228	163

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁺
Laramie	2	81	92
North Platte	2	105	104
Yampa	1	82	52

+ 1953-1967 period.

*This year in percent of avg.

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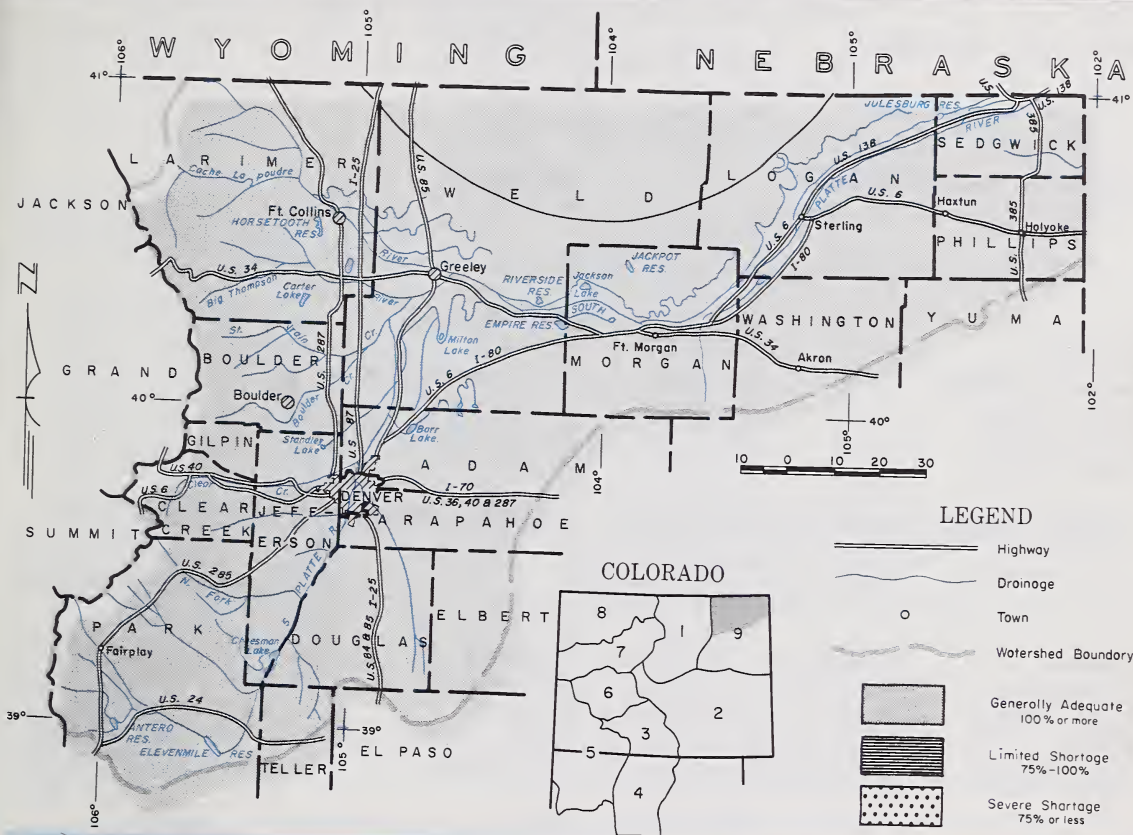
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WATER SUPPLY OUTLOOK FOR THE SOIL CONSERVATION DISTRICTS IN THE LOWER SOUTH PLATTE RIVER WATERSHED IN COLORADO as of

May 1, 1970

U.S. DEPARTMENT OF AGRICULTURE · SOIL CONSERVATION SERVICE
COLORADO EXPERIMENT STATION, STATE ENGINEERS OF COLORADO AND NEW MEXICO



YOUR WATER SUPPLY

THE SNOW PACK IS ONE OF THE BEST ON RECORD. ALL STREAMS ARE EXPECTED TO FLOW MUCH ABOVE NORMAL. HIGH WATER CAN BE ANTICIPATED THROUGH JUNE. RESERVOIRS ARE NEARLY ALL FULL. SOIL MOISTURE IS EXCELLENT IN THE IRRIGATED AS WELL AS DRY LAND.

FORECASTS ARE BASED ON NORMAL PRECIPITATION FOR THE ENTIRE FORECAST PERIOD. ABOVE NORMAL PRECIPITATION COULD CAUSE PROBLEMS IN LOW AREAS ALONG RIVER CHANNELS.

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The Conservation of Water begins with the Snow Survey

STREAMFLOW FORECASTS (1000 Ac. Ft.)

FORECAST POINT and Forecast Period	Forecast	Flow Period	
		Spring Season	Late Season
Big Thompson at Drake (1)	140	140	100
Boulder at Orodell	78	159	49
Cache La Poudre at Canon Mouth (2)	300	140	215
Clear Cr. at Golden (3)	200	168	119
Saint Vrain at Lyons (4)	115	164	70

(1) Observed flow plus by-pass to power plants.
 (2) Observed flow minus diversions through August P. Gumlick Tunnel.
 (3) Observed flow plus change in storage in Price Reservoir.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
South Platte from Greeley to Fort Morgan	Exc.	Avg.
South Platte from Fort Morgan to Sterling	Exc.	Avg.
South Platte below Sterling	Exc.	Avg.

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average +
Big Thompson	5	221	156
Boulder	3	296	172
Cache La Poudre	8	205	165
Clear Creek	5	248	157
Saint Vrain	3	428	168
South Platte	3	305	202

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average +
Big Thompson	3	93	108
Boulder	1	121	93
Cache La Poudre	2	81	92
Clear Creek	1	118	130
Saint Vrain	2	97	103
South Platte	2	88	89

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average +
Carter	108.9	104.5	90.8	86.4
Cheesman	79.0	79.1	49.6	50.2
Eleven Mile	97.8	96.4	94.6	72.9
Empire	37.7	33.9	33.3	29.0
Horsetooth	143.5	123.6	116.8	116.9

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average +
Jackson	35.4	34.4	34.4	33.7
Julesburg	28.2	23.6	20.8	22.1
Prewitt	32.8	26.8	23.7	17.5
Point of Rocks	70.0	70.3	69.8	60.8
Riverside	57.5	60.5	57.2	51.0

+ 1953-1967 period.

*This year in percent of avg.

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APPENDIX I

SNOW COURSE MEASUREMENTS as of May 1, 1970

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
				LAST YEAR	AVG 53 67
NORTH PLATTE BASIN					
<u>Laramie River</u>					
Deadman	5/1	73	26.1	10.5	17.1
McIntyre	4/25	50	15.2	9.4	9.4
Roach	4/26	78	20.0	13.6	18.7
<u>North Platte River</u>					
Cameron Pass	4/27	94	37.8	31.8	28.4
Columbine Lodge	4/29	77	30.4	15.0	21.4
Norghgate	4/27	28	9.3	1.2	2.7
Park View	4/28	39	13.0	6.0	5.6
Willow Cr. Pass(B)	4/28	50	16.5	11.0	10.0
SOUTH PLATTE BASIN					
<u>Boulder Creek</u>					
Baltimore	4/29	39	12.5	0.6	2.9
Boulder Falls	4/29	58	19.6	7.5	11.9
University Camp	4/29	75	28.9	12.5	20.7
<u>Big Thompson River</u>					
Deer Ridge	4/28	31	9.4	0.0	2.6
Hidden Valley	4/28	58	16.8	5.6	12.0
Lake Irene (B)	4/28	83	31.1	17.1	22.4
Long's Peak	5/2	62	19.4	8.9	12.0
Two Mile	4/29	77	25.8	14.7	17.0
<u>Cache La Poudre</u>					
Bennett Creek	4/28	36	11.5	0.6	-
Big South	5/3	1	0.4	0.3	0.6
Cameron Pass	4/27	94	37.8	31.8	28.4
Chambers Lake	5/3	28	12.5	3.4	5.3
Deadman Hill	5/1	73	26.1	10.5	17.1
Hour Glass Lake	4/28	37	12.1	3.0	5.6
Joe Wright	4/27	92	35.8	23.8	-
Lost Lake	5/3	46	17.4	6.2	8.9
Pine Creek	4/28	3	1.0	0.0	0.1
Red Feather	4/28	30	8.9	1.6	4.4
<u>Clear Creek</u>					
Berthoud Falls	4/29	39	22.5	6.3	12.1
Empire	4/29	43	14.1	4.2	6.8
Grizzly Peak (B)	4/28	76	29.5	14.2	19.4
Loveland Lift	4/29	86	29.9	17.7	25.3
Loveland Pass	4/29	68	26.9	7.1	14.5
<u>Saint Vrain River</u>					
Copeland Lake	4/28	19	5.7	0.5	1.7
Ward	4/28	37	10.8	1.3	5.4
Wild Basin	4/28	59	16.0	5.8	12.2
<u>South Platte River</u>					
Como	4/28	45	13.5	2.2	-
Geneva Park	4/23	31	8.0	0.1	1.2
Horseshoe Mt.	4/27	55	17.0	7.0	-
Hoosier Pass	4/29	60	17.5	9.4	12.0
Jefferson Creek	4/28	53	15.5	3.9	7.1
Mosquito	4/28	55	16.2	0.7	-
Trout Creek Pass	4/27	28	6.4	0.0	-
ARKANSAS BASIN					
<u>Arkansas River</u>					
Bigelow Divide	4/28	29	8.6	0.0	2.2
Cooper Hill (B)	4/28	58	17.1	10.2	11.1
East Fork	4/28	38	12.2	3.4	7.4
Four Mile Park	4/30	22	7.2	0.0	1.0
Fremont Pass	4/28	67	22.8	14.7	17.9
Garfield	4/29	45	14.6	5.9	8.5
Monarch Pass	4/29	62	20.9	12.3	16.5
Tennessee Pass	4/30	52	13.0	5.7	7.7
Twin Lakes Tunnel	4/29	44	12.2	5.5	8.7
Westcliffe	4/28	24	7.9	0.0	1.0

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
				LAST YEAR	AVG 53 67
<u>Cucharas River</u>					
Blue Lakes	4/28	2	0.6	NS	0.5
Cucharas Pass	4/28	28	10.0	0.0	-
LaVeta Pass (B)	4/28	15	4.3	0.0	1.6
<u>Purgatoire River</u>					
Bourbon	4/29	25	7.3	0.0	1.7
RIO GRANDE BASIN-Colo					
<u>Alamosa River</u>					
Silver Lakes	4/28	2	0.6	0.0	0.6
Summitville	4/24	67	19.6	19.0	19.0
<u>Conejos River</u>					
Cumbres	4/30	44	15.2	22.6	12.6
Platoro	4/27	41	11.6	12.7	9.9
River Springs	4/28	0	0.0	0.0	0.5
<u>Culebra River</u>					
Brown Cabin	5/3	8	1.9	0.0	-
Cottonwood (B)					
Culebra	4/28	23	7.0	4.3	3.5
LaVeta Pass (B)	4/28	15	4.3	0.0	1.6
Trinchera (B)	5/2	41	9.6	4.7	-
<u>Rio Grande</u>					
Cochetopa Pass	4/28	32	7.7	2.1	2.6
Grayback	4/24	50	16.6	13.6	-
Hiway	4/28	74	23.4	27.6	28.1
Lake Humphrey	4/29	3	0.8	0.7	0.4
Love Lake	4/24	35	9.8	3.4	-
Pass Creek	4/28	16	5.2	0.0	3.9
Pool Table	4/29	17	4.1	1.6	1.9
Porcupine	4/29	29	6.1	5.5	6.6
Santa Maria	4/30	0	0.0	0.0	0.5
Upper Rio Grande	5/1	6	1.8	1.2	1.8
Wolf Cr. Pass	4/28	68	21.1	24.3	22.0
Wolf Cr. Summit	4/28	88	28.9	32.9	30.0
SAN JUAN-DOLORES					
<u>Animas River</u>					
Cascade	4/28	14	4.2	6.5	3.6
Lemon	4/29	5	1.3	0.0	-
Mineral Creek	4/28	51	16.1	12.6	10.5
Molas Lake	4/28	38	12.1	10.4	6.8
Purgatory	4/29	58	18.2	NS	-
Red Mountain	4/28	97	36.6	32.2	30.3
Silverton Sub-Station	4/28	0	0.0	0.0	0.1
Spud Mountain	4/28	63	20.4	28.7	22.2
<u>Dolores River</u>					
Lizzard Head	4/29	55	17.3	22.3	12.9
Lone Cone	4/29	44	15.1	9.3	-
Rico	4/29	5	1.3	0.0	0.4
Telluride	4/28	20	7.3	0.0	0.8
Trout Lake	4/28	42	13.7	8.9	8.5
<u>San Juan River</u>					
Chama Divide (B)	4/30	0	0.0	0.0	-
Chamita (B)	4/30	0	0.0	0.0	-
Upper San Juan	4/28	69	21.7	29.4	26.6
Wolf Cr. Pass(B)	4/28	68	21.1	24.3	22.0
Wolf Cr. Summit	4/28	88	28.9	32.9	30.0

NS - No Survey
(B) - On Adjacent Drainage

APPENDIX I

SNOW COURSE MEASUREMENTS as of May 1, 1970

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
				LAST YEAR	AVG 53-67
GUNNISON BASIN					
<u>Gunnison River</u>					
Alexander Lake	4/29	75	27.1	25.3	21.0
Black Mesa	NS			NS	15.8
Blue Mesa	4/30	25	8.1	0.0	1.9
Butte	4/30	59	17.9	14.1	-
Cochetopa Pass (B)	4/28	32	7.7	2.1	2.6
Crested Butte	4/29	36	10.1	3.7	7.1
Keystone	4/29	66	19.2	14.6	17.1
Lake City	4/27	32	9.5	2.6	3.5
Long Gulch	NS				
Mesa Lakes (B)	4/26	65	21.3	15.0	15.1
McClure Pass	4/28	48	17.0	6.7	9.3
Park Cone	4/29	39	12.1	6.6	7.7
Park Reservoir	4/28	79	26.3	29.6	23.6
Porphyry Creek	4/29	64	19.6	12.9	16.5
Tomichi	4/29	45	13.8	8.8	10.0
<u>Surface Creek</u>					
Alexander Lake	4/29	75	27.1	25.3	21.0
Mesa Lakes (B)	4/26	65	21.3	15.0	15.1
Park Reservoir	4/28	79	26.3	29.6	23.6
<u>Uncompahgre River</u>					
Ironton Park	4/30	46	15.6	1.3	6.7
Red Mountain Pass	4/28	97	36.6	32.2	30.3
Telluride (B)	4/28	20	7.3	0.0	0.8
COLORADO BASIN (Main)					
<u>Blue River</u>					
Blue River	4/29	44	12.5	2.3	6.4
Fremont Pass	4/28	67	22.8	14.7	17.9
Frisco	4/28	34	11.4	0.2	4.6
Grizzley Peak	4/28	76	29.5	14.2	19.4
Hoosier Pass (B)	4/29	60	17.5	9.4	12.0
Shrine Pass	4/28	73	27.9	17.4	18.7
Snake River	4/28	29	11.6	0.0	3.5
Summit Ranch	4/29	32	10.6	2.2	4.8
<u>Colorado River</u>					
Arrow	4/29	50	18.6	8.0	9.2
Berthoud Pass	4/27	59	22.8	13.0	14.3
Berthoud Summit	4/29	82	32.4	12.2	20.6
Cooper Hill	4/28	58	17.1	10.2	11.1
Fiddler Gulch	4/29	64	18.8	9.4	14.7
Glen Mar Ranch	4/28	24	9.1	1.5	3.8
Gore Pass	4/29	38	13.8	4.6	7.3
Grand Lake	4/28	28	8.4	3.3	3.4
Lake Irene	4/28	83	31.1	17.1	22.4
Lapland	4/29	43	14.8	2.0	6.9
Lulu	4/29	81	29.3	15.1	18.3
Lynx Pass	4/29	43	15.3	4.0	7.1
McKenzie Gulch	4/27	18	4.9	0.0	0.6
Middle Fork	4/28	30	10.3	3.0	5.7
Milner	4/28	53	17.8	10.3	12.0
North Inlet	4/26	38	12.0	4.0	5.9
Pando	4/28	42	14.7	4.4	7.7
Phantom Valley	4/28	39	13.1	5.8	6.2
Ranch Creek	4/29	47	14.9	8.8	9.0
Tennessee Pass	4/30	52	13.0	5.7	7.7
Vail Pass	4/28	65	26.4	10.2	15.0
Vasquez	4/28	54	18.5	9.3	12.4

SNOW COURSE	CURRENT INFORMATION			PAST RECORD	
	DATE OF SURVEY	SNOW DEPTH (INCHES)	WATER CONTENT (INCHES)	WATER CONTENT (INCHES)	
				LAST YEAR	AVG YEAR
53 67					
<u>Roaring Fork River</u>					
Aspen	4/28	72	26.7	16.0	16.0
Chapman	4/29	53	18.0	8.6	-
Independence Pass	4/29	66	20.4	9.4	16.2
Ivanhoe	4/29	73	24.6	11.7	17.3
Kiln	4/29	40	13.4	4.2	-
Last Chance	4/29	47	14.5	7.3	-
Lift	4/28	70	24.9	16.4	18.0
McClure Pass	4/28	48	17.0	6.7	9.3
Nast	4/29	21	6.8	0.0	1.8
North Lost Trail	4/28	47	15.5	5.7	7.5
<u>Williams Fork River</u>					
Glen Mar Ranch	4/28	24	9.1	1.5	3.8
Jones Pass	4/28	64	24.1	9.7	15.4
Middle Fork	4/28	30	10.3	3.0	5.7
<u>Willow Creek</u>					
Granby	4/28	30	10.2	1.1	3.6
Willow Cr. Pass	4/28	50	16.5	11.0	10.0
<u>Plateau Creek</u>					
Mesa Lakes	4/26	65	21.3	15.0	15.1
Park Reservoir	4/28	79	26.3	29.6	23.6
Trickle Divide	4/29	87	29.8	30.8	26.5
YAMPA BASIN					
<u>Elk River</u>					
Clark	4/28	27	9.4	1.1	3.1
Elk River	4/28	60	20.6	14.2	13.6
Hahn's Peak	4/28	39	14.1	6.6	7.8
<u>White River</u>					
Burro Mountain	4/29	62	22.2	9.5	14.5
Rio Blanco	4/28	48	17.0	6.9	9.1
<u>Yampa River</u>					
Bear River	4/27	49	15.9	2.1	7.4
Columbine (B)	4/29	77	30.4	15.0	21.4
Dry Lake	4/30	63	23.8	13.1	15.2
Lynx Pass (B)	4/29	43	15.3	4.0	7.1
Rabbit Ears	4/29	97	37.7	23.1	25.9
Yampa View	4/29	47	15.8	3.6	8.4

NOTE:
NS - No Survey
(B) - On Adjacent Drainage

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of May 1, 1970

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
<u>North Platte River</u>					
Muddy Pass	4/29	11.1	7.1	8.3	8.4
Willow Pass	4/30	9.5	8.9	6.9	7.0
SOUTH PLATTE BASIN					
<u>Boulder Creek</u>					
Alpine Camp	5/1	6.9	4.0	3.3	4.3
<u>Big Thompson River</u>					
Beaver Dam	4/29	7.1	5.3	6.3	4.7
Guard Station	5/2	6.9	3.7	5.0	4.5
Two Mile	4/29	9.1	6.7	5.5	5.4
<u>Clear Creek</u>					
Clear Creek	4/29	9.5	7.4	6.3	5.7
Hoop Creek	NS	4.9	--	3.8	3.1
<u>Cache La Poudre River</u>					
Feather	4/28	10.1	7.6	9.3	7.9
Laramie Road	5/3	12.4	7.6	9.4	8.7
<u>South Platte River</u>					
Hoosier Pass	4/29	7.8	5.2	5.0	5.4
Kenosha Pass	4/28	4.4	2.7	4.2	3.5
ARKANSAS BASIN					
<u>Arkansas River</u>					
Garfield	4/29	6.7	4.3	4.1	4.8
Leadville	4/28	7.8	3.2	3.3	4.9
Twin Lakes Tunnel	4/28	4.5	1.9	2.8	3.1
RIO GRANDE BASIN - COLORADO					
<u>Conejos River</u>					
Mogote	4/27	10.7	7.1	8.7	8.8
<u>Rio Grande</u>					
Alberta Park	4/29	8.2	3.9	5.8	5.7
Bristol View	4/29	6.1	5.7	4.6	4.7
LaVeta Pass	4/28	11.9	11.5	11.4	11.6
ANIMAS-SAN JUAN BASINS					
<u>Animas River</u>					
Cascade	4/28	9.1	5.6	6.0	7.7
Mineral Creek	4/28	4.7	3.9	4.0	4.5
Molas Lake	4/28	9.4	3.6	4.6	6.6
<u>Dolores River</u>					
Dolores	4/29	19.6	9.0	12.0	12.2
Lizzard Head	4/29	11.8	4.7	5.3	8.2
Rico	4/29	13.8	10.5	10.4	7.3
GUNNISON BASIN					
<u>Gunnison River</u>					
King	4/29	3.3	2.3	2.3	2.3
COLORADO BASIN (MAINSTEM)					
<u>Blue River</u>					
Blue River	4/29	4.2	3.3	2.8	3.0
<u>Colorado River</u>					
Berthoud Pass	4/27	3.9	3.3	2.9	2.9
Gore	4/29	4.9	4.2	4.6	4.1
Grand Mesa	4/28	12.5	11.6	12.9	9.9
Ranch Creek	4/29	8.7	6.5	6.0	6.2
Vail	4/28	12.3	9.0	9.1	10.5
<u>Roaring Fork River</u>					
Placita	4/30	9.3	8.1	6.5	7.6
YAMPA BASIN					
<u>Yampa River</u>					
Hahn's Peak	4/28	19.0	7.8	9.5	15.0

ALL PROFILES 4 FEET DEEP

APPENDIX II

SOIL MOISTURE MEASUREMENTS as of May 1, 1970

STATION	DATE OF SURVEY	CAPACITY (INCHES)	THIS YEAR	LAST YEAR	AVG. ALL DATA
NORTH PLATTE BASIN					
<u>North Platte River</u>					
Muddy Pass	4/29	11.1	7.1	8.3	8.4
Willow Pass	4/30	9.5	8.9	6.9	7.0
SOUTH PLATTE BASIN					
<u>Boulder Creek</u>					
Alpine Camp	5/1	6.9	4.0	3.3	4.3
<u>Big Thompson River</u>					
Beaver Dam	4/29	7.1	5.3	6.3	4.7
Guard Station	5/2	6.9	3.7	5.0	4.5
Two Mile	4/29	9.1	6.7	5.5	5.4
<u>Clear Creek</u>					
Clear Creek	4/29	9.5	7.4	6.3	5.7
Hoop Creek	NS	4.9	- -	3.8	3.1
<u>Cache La Poudre River</u>					
Feather	4/28	10.1	7.6	9.3	7.9
Laramie Road	5/3	12.4	7.6	9.4	8.7
<u>South Platte River</u>					
Hoosier Pass	4/29	7.8	5.2	5.0	5.4
Kenosha Pass	4/28	4.4	2.7	4.2	3.5
ARKANSAS BASIN					
<u>Arkansas River</u>					
Garfield	4/29	6.7	4.3	4.1	4.8
Leadville	4/28	7.8	3.2	3.3	4.9
Twin Lakes Tunnel	4/28	4.5	1.9	2.8	3.1
RIO GRANDE BASIN - COLORADO					
<u>Conejos River</u>					
Mogote	4/27	10.7	7.1	8.7	8.8
<u>Rio Grande</u>					
Alberta Park	4/29	8.2	3.9	5.8	5.7
Bristol View	4/29	6.1	5.7	4.6	4.7
LaVeta Pass	4/28	11.9	11.5	11.4	11.6
ANIMAS-SAN JUAN BASINS					
<u>Animas River</u>					
Cascade	4/28	9.1	5.6	6.0	7.7
Mineral Creek	4/28	4.7	3.9	4.0	4.5
Molas Lake	4/28	9.4	3.6	4.6	6.6
<u>Dolores River</u>					
Dolores	4/29	19.6	9.0	12.0	12.2
Lizzard Head	4/29	11.8	4.7	5.3	8.2
Rico	4/29	13.8	10.5	10.4	7.3
GUNNISON BASIN					
<u>Gunnison River</u>					
King	4/29	3.3	2.3	2.3	2.3
COLORADO BASIN (MAINSTEM)					
<u>Blue River</u>					
Blue River	4/29	4.2	3.3	2.8	3.0
<u>Colorado River</u>					
Berthoud Pass	4/27	3.9	3.3	2.9	2.9
Gore	4/29	4.9	4.2	4.6	4.1
Grand Mesa	4/28	12.5	11.6	12.9	9.9
Ranch Creek	4/29	8.7	6.5	6.0	6.2
Vail	4/28	12.3	9.0	9.1	10.5
<u>Roaring Fork River</u>					
Placita	4/30	9.3	8.1	6.5	7.6
YAMPA BASIN					
<u>Yampa River</u>					
Hahn's Peak	4/28	19.0	7.8	9.5	15.0

ALL PROFILES 4 FEET DEEP

LIST of COOPERATORS

The following organizations cooperate in snow surveys for the Colorado, Platte, Arkansas and Rio Grande watersheds. Many other organizations and individuals furnish valuable information for the snow survey reports. Their cooperation is gratefully acknowledged.

STATE

Colorado State Engineer
New Mexico State Engineer
Nebraska State Engineer
Colorado Experiment Station
Rocky Mountain Forest and Range Experiment Station

FEDERAL

Department of Agriculture

Forest Service
Soil Conservation Service

Department of Interior

Bureau of Reclamation
Geological Survey
National Park Service
Indian Service

Department of Commerce

Weather Bureau

War Department

Army Engineer Corps

Atomic Energy Commission

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Public Service Company of New Mexico

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City of Boulder	City of Fort Collins

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Arkansas Valley Ditch Association
Colorado River Water Conservation District

IRRIGATION PROJECTS

Farmers Reservoir and Irrigation Company
San Luis Valley Irrigation District
Santa Maria Reservoir Company
Costilla Land Company
Uncompahgre Valley Water Users' Association
Twin Lakes Reservoir and Canal Company
Trinchera Irrigation Co.

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SOIL CONSERVATION SERVICE

SNOW SURVEY UNIT
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with the Snow Survey"*